Claim 7 (twice-amended). An electro-optical module for transmitting and/or receiving light of a plurality of optical data channels, comprising:

an optical waveguide for carrying light of a plurality of optical data channels, said optical waveguide having an optical axis, said optical waveguide forming at least two optical waveguide sections, said at least two optical waveguide sections including a first optical waveguide section having an inclined end surface and a second optical waveguide section having an inclined end surface;

at least one optical component, said optical component selected from the group consisting of a transmitting component providing light that is injected into said optical waveguide, and a detecting component that receives and detects light output from said optical waveguide;

a first glass ferrule;

a second glass ferrule; and

a mounting tube receiving said first glass ferrule, said first optical waveguide section, said second glass ferrule, and said second optical waveguide section;

said mounting tube axially positioning said first glass ferrule with respect to said second glass ferrule;

said inclined end surface of said first optical waveguide section being positioned along the optical axis and adjacent said inclined end surface of said second optical waveguide section;

said inclined end surface of said second optical waveguide section configured to perform a function selected from the group consisting of:

injecting light for one of said plurality of said optical data channels into said optical waveguide when the injected light is provided to said inclined end surface of said second optical waveguide section at an angle relative to the optical axis of said waveguide, and

outputting light of one of said plurality of said optical data channels from said optical waveguide at an angle relative to the optical axis of said waveguide;

said first glass ferrule receiving said first optical waveguide section and having an end surface that is inclined to correspond to said inclined end surface of said first optical waveguide section, said first glass ferrule being

transparent for the light of the plurality of the optical channels; and

said second glass ferrule receiving said second optical waveguide section and having an end surface that is inclined to correspond to said inclined end surface of said second optical waveguide section, said second glass ferrule being transparent for the light of the plurality of the optical channels.

C1 cont'

Claim 15 (twice-amended). The module according to claim 7, comprising:

C2 immersion means;

said first optical waveguide section and said second optical waveguide section defining a gap therebetween;

said immersion means filling said gap and having a matched refractive index.

C3 Claim 17 (twice-amended). The module according to claim 7, comprising:

a plurality of waveguide sections having inclined surfaces, said plurality of said waveguide sections including said at least two waveguide sections;

said at least one optical component including a plurality of optical components that are each selected from the group consisting of a transmitting component providing light that is injected into said optical waveguide, and a detecting component that receives and detects light output from said optical waveguide;

C3 cont.

said plurality of said optical components being sequentially located;

each one of said plurality of said optical components being associated with an inclined surface selected from the group consisting of said inclined surfaces of said plurality of said waveguide sections.

Claim 19 (twice-amended). The module according to claim 7, wherein said second optical waveguide section has an optical axis and said optical component has an optical axis that runs esentially perpendicular to the optical axis of said second optical waveguide section.

C4

Claim 24 (amended). The module according to claim 7, comprising:

a coupling lens;

C5 said optical component and said inclined end surface of said second optical waveguide section defining a beam path therebetween;

said coupling lens located in the beam path between said optical component and said inclined end surface of said second optical waveguide section.

Please add the following claims:

-- 35. The module according to claim 1, wherein said inclined surface of said first waveguide section and said inclined end surface of said second waveguide section are adjacent and form

C6 a beam splitter.

36. The module according to claim 35, wherein said beam splitter is a 50/50 beam splitter.

37. An optical waveguide structure for transmitting and/or receiving light of a plurality of optical data channels, comprising:

an optical waveguide for carrying light of a plurality of optical data channels, said optical waveguide having an optical axis, said optical waveguide forming at least two optical waveguide sections, said at least two optical waveguide sections including a first optical waveguide section having an inclined end surface and a second optical waveguide section having an inclined end surface;

a first glass ferrule;

a second glass ferrule; and

a mounting tube receiving said first glass ferrule, said first optical waveguide section, said second glass ferrule, and said second optical waveguide section;

said mounting tube axially positioning said first glass ferrule with respect to said second glass ferrule;

said inclined end surface of said first optical waveguide section being positioned along the optical axis and adjacent said inclined end surface of said second optical waveguide section;

said inclined end surface of said second optical waveguide section configured to perform a function selected from the group consisting of:

injecting light for one of said plurality of said optical data channels into said optical waveguide when the injected light is provided to said inclined end surface of said second optical waveguide section at an angle relative to the optical axis of said waveguide, and

outputting light of one of said plurality of said optical data channels from said optical waveguide at an angle relative to the optical axis of said waveguide;

said first glass ferrule receiving said first optical waveguide section and having an end surface that is inclined to correspond to said inclined end surface of said first optical waveguide section, said first glass ferrule being transparent for the light of the plurality of the optical channels; and

said second glass ferrule receiving said second optical waveguide section and having an end surface that is inclined to correspond to said inclined end surface of said second optical waveguide section, said second glass ferrule being

transparent for the light of the plurality of the optical channels. --

C4 Cont.